CLAIM AMENDMENTS

1. (Currently Amended) A method for enhancing bone density or formation, the method comprising (a) administering to at least one first cell within a bone or within a tissue immediately surrounding a bone an adenoviral vector comprising at least one first nucleic acid encoding a VEGF 121, and (b) administering to at least one second cell within the bone or within a tissue immediately surrounding the bone an adenoviral vector comprising at least one second nucleic acid encoding at least one osteogenic protein, wherein the osteogenic protein is selected from the group consisting of a latent TGF binding protein (LTBP), latent membrane protein-1 (LMP-1), a heparin-binding neurotrophic factor (HBNF), a parathyroid hormone (PTH), a growth factor receptor, a LIM mineralization protein (LMP), a hedgehog protein, ~~transforming growth factor β1 (TGF-β1),~~ and midkine (MK), such that the first nucleic acid is expressed in the first cell to produce the vascular endothelial growth factor, and the second nucleic acid is expressed in the second cell to produce the osteogenic protein, whereby bone density or formation is enhanced within the region.

2. (Previously Presented) The method of claim 1, wherein the adenoviral vector is exposed to at least one cell *in vivo* in the region of the bone.

3. (Previously Presented) The method of claim 1, wherein the adenoviral vector is exposed to at least one cell *ex vivo*, which is then delivered *in vivo* to the region of the bone.

4.-10. (Cancelled)

11. (Previously Presented) The method of claim 1, wherein the osteogenic protein is MK.

12. (Previously Presented) The method of claim 1, wherein the osteogenic protein is HBNF.

13.-16. (Cancelled)

17. (Previously Presented) The method of claim 1, wherein the first cell and the second cell are the same cell.

18. (Cancelled)

19. (Currently Amended) An adenoviral vector comprising at least one first nucleic acid encoding a vascular endothelial growth factor VEGF 121 and at least one second nucleic acid encoding at least one osteogenic protein, wherein the osteogenic protein is selected from the group consisting of a latent TGF binding protein (LTBP), latent membrane protein-1 (LMP-1), a heparin-binding neurotrophic factor (HBNF), a parathyroid hormone (PTH), a growth factor receptor, a LIM mineralization protein (LMP), a hedgehog protein, ~~transforming growth factor β1 (TGF-β1),~~ and midkine (MK).

20. (Cancelled)

21. (Original) The adenoviral vector of claim 19, which is deficient in at least one essential gene function.

22. (Currently Amended) A bone graft comprising at least one first cell having at least one first exogenous nucleic acid encoding a vascular endothelial growth factor VEGF 121 and at least one second cell having at least one second nucleic acid encoding at least one osteogenic protein, wherein the osteogenic protein is selected from the group consisting of a latent TGF binding protein (LTBP), latent membrane protein-1 (LMP-1), a heparin-binding neurotrophic factor (HBNF), a parathyroid hormone (PTH), a growth factor receptor, a LIM mineralization protein (LMP), a hedgehog protein, ~~transforming growth factor β1 (TGF-β1),~~ and midkine (MK).

23.-24. (Cancelled)

25. (Previously Presented) The bone graft of claim 22, which is an allograft.

26.-31. (Cancelled)

32. (Previously Presented) The bone graft of claim 22, wherein the osteogenic protein is MK.

33. (Previously Presented) The bone graft of claim 22, wherein the osteogenic protein is HBNF.

34.-41. (Cancelled)

42. (Previously Presented) The adenoviral vector of claim 19, wherein the osteogenic protein is MK.

43. (Previously Presented) The adenoviral vector of claim 19, wherein the osteogenic protein is HBNF.

44. (Currently Amended) A method for enhancing bone density or formation, the method comprising administering to at least one first cell within a bone or within a tissue immediately surrounding a bone an adenoviral vector comprising at least one first nucleic acid encoding a vascular endothelial growth factor, and administering to at least one second cell within the bone or within a tissue immediately surrounding the bone an adenoviral vector comprising at least one second nucleic acid encoding at least one osteogenic protein, wherein the osteogenic protein is ~~selected from the group consisting of~~ a heparin-binding neurotrophic factor (HBNF)~~, transforming growth factor β1 (TGF-β1), and~~ or midkine (MK), such that the first nucleic acid is expressed in the first cell to produce the vascular endothelial growth factor, and the second nucleic acid is expressed in the second cell to produce the osteogenic protein, whereby bone density or formation is enhanced within the region.

45. (Previously Presented) The method of claim 44, wherein the vascular endothelial growth factor is selected from the group consisting of VEGF121, VEGF 165, VEGFA 138, VEGFA 162, VEGF 182, VEGF 189, and VEGF-C.

46. (Previously Presented) The method of claim 44, wherein the osteogenic protein is MK.

47. (Previously Presented) The method of claim 44, wherein the osteogenic protein is HBNF.

48. (Previously Presented) The method of claim 44, wherein the adenoviral vector is exposed to at least one cell *in vivo* in the region of the bone.

49. (Previously Presented) The method of claim 44, wherein the adenoviral vector is exposed to at least one cell *ex vivo*, which is then delivered *in vivo* to the region of the bone.

50. (Previously Presented) The method of claim 44, wherein the first cell and the second cell are the same cell.

51. (Cancelled)

52. (Currently Amended) An adenoviral vector comprising at least one first nucleic acid encoding a vascular endothelial growth factor and at least one second nucleic acid encoding at least one osteogenic protein, wherein the osteogenic protein is ~~selected from the group consisting~~ a heparin-binding neurotrophic factor (HBNF)~~, transforming growth factor β1 (TGF-β1), and~~ or midkine (MK).

53. (Previously Presented) The adenoviral vector of claim 52, wherein the vascular endothelial growth factor is selected from the group consisting of VEGF 121, VEGF 165, VEGFA 138, VEGFA 162, VEGF 182, VEGF 189, and VEGF-C.

54. (Previously Presented) The adenoviral vector of claim 52, wherein the osteogenic protein is MK.

55. (Previously Presented) The adenoviral vector of claim 52, wherein the osteogenic protein is HBNF.

56. (Previously Presented) The adenoviral vector of claim 52, which is deficient in at least one essential gene function.

57. (Cancelled)

58. (Currently Amended) A bone graft comprising at least one first cell having at least one first exogenous nucleic acid encoding a vascular endothelial growth factor and at least one second cell having at least one second nucleic acid encoding at least one osteogenic protein, wherein the osteogenic protein is ~~selected from the group consisting of~~ a heparin-binding neurotrophic factor (HBNF)~~, transforming growth factor β1 (TGF-β1), and~~ or midkine (MK).

59. (Previously Presented) The bone graft of claim 58, wherein the vascular endothelial growth factor is selected from the group consisting of VEGF 121, VEGF 165, VEGFA 138, VEGFA 162, VEGF 182, VEGF 189, and VEGF-C.

60. (Previously Presented) The bone graft of claim 58, wherein the osteogenic protein is MK.

61. (Previously Presented) The bone graft of claim 58, wherein the osteogenic protein is HBNF.

62. (Previously Presented) The bone graft of claim 58, which is an allograft.

63.-65. (Cancelled)

66. (Previously Presented) The method of claim 1, wherein the osteogenic protein is selected from the group consisting of a latent TGF binding protein (LTBP), latent membrane protein-1 (LMP-1), and a parathyroid hormone.

67. (Previously Presented) The method of claim 1, wherein the osteogenic protein is selected from the group consisting of a growth factor receptor, a LIM mineralization protein (LMP), and a hedgehog protein.

68. (Previously Presented) The adenoviral vector of claim 19, wherein the osteogenic protein is selected from the group consisting of a latent TGF binding protein (LTBP), latent membrane protein-1 (LMP-1), and a parathyroid hormone.

69. (Previously Presented) The adenoviral vector of claim 19, wherein the osteogenic protein is selected from the group consisting of a growth factor receptor, a LIM mineralization protein (LMP), and a hedgehog protein.

70. (Previously Presented) The bone graft of claim 22, wherein the osteogenic protein is selected from the group consisting of a latent TGF binding protein (LTBP), latent membrane protein-1 (LMP-1), and a parathyroid hormone.

71. (Previously Presented) The bone graft of claim 22, wherein the osteogenic protein is selected from the group consisting of a growth factor receptor, a LIM mineralization protein (LMP), and a hedgehog protein.